



Advanced Pharmaceutical Chemistry
(Revised Scheme 4)

Q.P. CODE: 9346

Your answers should be specific to the questions asked.
Draw neat, labeled diagrams wherever necessary.

LONG ESSAY (Answer any TWO)

2 X 20 = 40 Marks

1. What are free radicals? Explain the structure, generation, stability and reaction involving free radicals.
2. Add note on protection and deprotection of hydroxyl and amine groups.
3. Write in detail with examples of homogenous and heterogenous catalysis.

SHORT ESSAY (Answer any FIVE)

5 X 10 = 50 Marks

4. What is Benzyne mechanism? Explain the facts supporting the mechanism.
5. Give an account of combinatorial chemistry with special reference to parallel organic synthesis.
6. Discuss the principle and various techniques in green chemistry.
7. Give the mechanism and applications of pinacol-pinacolone rearrangement.
8. Discuss the following with relevant examples: - (a) Perkin's reaction, (b) Benzoin condensation.
9. Explain synthon approaches in synthesis of trimethoprim and ciprofloxacin.

SHORT NOTES

2 X 5 = 10 Marks

10. Phase transfer catalysis
11. Aldol condensation

* * * * *